



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20150916000

**Qualification of GFAB as an additional Wafer Fab site option for select devices
Change Notification / Sample Request**

Date: 9/23/2015
To: MOUSER PCN

Dear Customer:

This is an announcement of change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

Texas Instruments requires acknowledgement of receipt of this notification within 30 days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. The proposed first ship date is indicated on page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

If samples or additional data are required, requests must be received within 30 days of acknowledgement as samples are not built ahead of the change. You may contact the PCN Manager or your local Field Sales Representative to acknowledge this PCN and request samples or additional data.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services

20150916000
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
EMB1428QSQE/NOPB	null
EMB1499QMHE/NOPB	null
LM22670QMR-5.0/NOPB	null
LM22670QMR-ADJ/NOPB	null
LM22671QMR-ADJ/NOPB	null
LM22672QMR-ADJ/NOPB	null
LM22672QMRE-5.0/NOPB	null
LM22675QMR-ADJ/NOPB	null
LM22675QMRE-ADJ/NOPB	null
LM22676QMR-5.0/NOPB	null
LM22676QMR-ADJ/NOPB	null
LM22676QTJE-5.0/NOPB	null
LM22677QTJE-ADJ/NOPB	null
LM22678QTJE-5.0/NOPB	null
LM22678QTJE-ADJ/NOPB	null
LM22680QMRE-ADJ/NOPB	null
LM25011AQ1MY/NOPB	null
LM25011Q1MY/NOPB	null
LM2840XQMK/NOPB	null
LM2841XQMK/NOPB	null
LM2841YQMK/NOPB	null
LM2842XQMK/NOPB	null
LM3492QMH/NOPB	null

Technical details of this Product Change follow on the next page(s).

PCN Number:	20150916000		PCN Date:	09/23/2015
Title:	Qualification of GFAB as an additional Wafer Fab site option for select devices in ABCD05/ABCD5HV Technology			
Customer Contact:	PCN Manager		Dept:	Quality Services
Proposed 1st Ship Date:	03/23/2016	Estimated Sample Availability:	Date provided at sample request	
Change Type:				
☐ Assembly Site	☐ Assembly Process	☐ Assembly Materials		
☐ Design	☐ Electrical Specification	☐ Mechanical Specification		
☐ Test Site	☐ Packing/Shipping/Labeling	☐ Test Process		
☐ Wafer Bump Site	☐ Wafer Bump Material	☐ Wafer Bump Process		
☒ Wafer Fab Site	☐ Wafer Fab Materials	☐ Wafer Fab Process		
	☐ Part number change			
PCN Details				
Description of Change:				
This change notification is to announce the addition of GFAB as an additional Wafer Fab site option for the products listed in the product affected section of this document.				
Current Wafer Fab Site		Process	Wafer Diameter	
MAINEFAB		ABCD05/ABCD5HV	200mm	
Additional Fab Site		Process	Wafer Diameter	
GFAB8		ABCD05/ABCD5HV	200mm	
Reason for Change:				
Continuity of Supply				
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):				
None				
Changes to product identification resulting from this PCN:				
Current				
Chip Site	Chip Site Origin (20L)	Chip Site Country Code (21L)	Chip Site City	
MAINEFAB	CUA	USA	South Portland	
New				
Chip Site	Chip Site Origin (20L)	Chip Site Country Code (21L)	Chip Site City	
GFAB8	GF8	GBR	Greenock	
Sample product shipping label (not actual product label)				
 TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 20: MSL 2 / 260C / 1 YEAR MSL 1 / 235C / UNLIM OPT: 39 ITEM: 39 LBL: 5A (L)T0:1750   (1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483SI2 (P) (2P) REV: (V) 0033317 (20L) CS0: SHE (21L) CC0:USA (22L) AS0: MLA (23L) AG0: MYS				

Product Affected:

EMB1428QSQ/NOPB	LM22673QMR-5.0/NOPB	LM22676QTJ-ADJ/NOPB	LM25117QPSQ/NOPB
EMB1428QSQE/NOPB	LM22673QMR-ADJ/NOPB	LM22676QTJE-5.0/NOPB	LM25117QPSQE/NOPB
EMB1428QSQX/NOPB	LM22673QMRE-5.0/NOPB	LM22676QTJE-ADJ/NOPB	LM25117QPSQX/NOPB
EMB1499QMH/NOPB	LM22673QMRE-ADJ/NOPB	LM22677QTJ-ADJ/NOPB	LM25119QPSQ/NOPB
EMB1499QMHE/NOPB	LM22673QMRX-5.0/NOPB	LM22677QTJE-5.0/NOPB	LM25119QPSQX/NOPB
EMB1499QMHX/NOPB	LM22673QMRX-ADJ/NOPB	LM22677QTJE-ADJ/NOPB	LM2840XQMK/NOPB
LM22670QMR-5.0/NOPB	LM22673QTJ-5.0/NOPB	LM22678QTJ-5.0/NOPB	LM2840YQMK/NOPB
LM22670QMR-ADJ/NOPB	LM22673QTJ-ADJ/NOPB	LM22678QTJ-ADJ/NOPB	LM2840YQMKX/NOPB
LM22670QMRE-5.0/NOPB	LM22673QTJE-5.0/NOPB	LM22678QTJE-5.0/NOPB	LM2841XQMK/NOPB
LM22670QMRE-ADJ/NOPB	LM22673QTJE-ADJ/NOPB	LM22678QTJE-ADJ/NOPB	LM2841YQMK/NOPB
LM22670QMRX-5.0/NOPB	LM22674QMR-5.0/NOPB	LM22679QTJ-5.0/NOPB	LM2841YQMKX/NOPB
LM22670QTJ-5.0/NOPB	LM22674QMR-ADJ/NOPB	LM22679QTJ-ADJ/NOPB	LM2842XQMK/NOPB
LM22670QTJ-ADJ/NOPB	LM22674QMRE-5.0/NOPB	LM22679QTJE-5.0/NOPB	LM2842XQMKX/NOPB
LM22670QTJE-5.0/NOPB	LM22674QMRE-ADJ/NOPB	LM22679QTJE-ADJ/NOPB	LM2842YQMK/NOPB
LM22670QTJE-ADJ/NOPB	LM22675QMR-5.0/NOPB	LM22680QMR-ADJ/NOPB	LM2842YQMKX/NOPB
LM22671QMR-ADJ/NOPB	LM22675QMR-ADJ/NOPB	LM22680QMRE-ADJ/NOPB	LM3492AHCQMH/NOPB
LM22671QMRE-5.0/NOPB	LM22675QMRE-5.0/NOPB	LM22680QMRX-ADJ/NOPB	LM3492AHCQMHX/NOPB
LM22671QMRE-ADJ/NOPB	LM22675QMRE-ADJ/NOPB	LM22680QMRX-ADJ/S7002842	LM3492HCQMH/NOPB
LM22671QMRX-ADJ/NOPB	LM22675QMRX-ADJ/NOPB	LM25011AQ1MY/NOPB	LM3492HCQMHX/NOPB
LM22672QMR-5.0/NOPB	LM22676QMR-5.0/NOPB	LM25011AQ1MYX/NOPB	LM3492QMH/NOPB
LM22672QMR-ADJ/NOPB	LM22676QMR-ADJ/NOPB	LM25011Q1MY/NOPB	LM3492QMHX/NOPB
LM22672QMRE-5.0/NOPB	LM22676QMRE-5.0/NOPB	LM25011Q1MYX/NOPB	LM34937QPMH/NOPB
LM22672QMRE-ADJ/NOPB	LM22676QMRE-ADJ/NOPB	LM25117QPMH/NOPB	LM34937QPMHX/NOPB
LM22672QMRX-ADJ/E7002859	LM22676QMRX-5.0/NOPB	LM25117QPMHE/NOPB	LM34937QPSQ/NOPB
LM22672QMRX-ADJ/E7002930	LM22676QMRX-ADJ/NOPB	LM25117QPMHX/NOPB	LM34937QPSQX/NOPB
LM22672QMRX-ADJ/NOPB	LM22676QTJ-5.0/NOPB		

Qualification of ABCD5HV Process in GFAB Scotland
Automotive Grade 1 (As per AEC-Q100 and JEDEC Guidelines)

Approved 08/29/2014

Product Attributes

	Qual Device: LM5006MMNOPB
Automotive Grade Level	Grade 1
Operating Temp Range	-40C to 125C
Wafer Fab Supplier	GFAB 200MM
Die Revision	A
Assembly Site	TIEM-AT
Package Type	VSSOP
Package Designator	DGS
Ball/Lead Count	10

- Qual Device LM5006MMNOPB is qualified at LEVEL 1-260C

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	#	Test Spec	Test Name / Condition	Duration	Qual Device: LM5006MMNOPB
Test Group A - Accelerated Environment Stress Test					
PC	A1	JESD22-113	Automotive Preconditioning Level 1	Level 1-260C	3/743/2 (Note 1)
HAST	A2	JESD22-A110	Biased HAST, 130C/85%RH	96 Hours	3/231/1 (Note 1)
AC	A3	JESD22-A102	Autoclave 121C	96 Hours	3/231/0
TC	A4	JESD22-A104	Temperature Cycle, -65/150C	500 Cycles	3/231/0
TC-BP	A4	per MIL-STD 883 Method 2011	Auto Post TC Bond Pull	-	Pass
HTSL	A6	JESD22-A103	High Temp Storage Bake 150C	1000 Hours	1/50/0
Test Group B - Accelerated Lifetime Simulation Test					
HTOL	B1	JESD22-A108	Life Test, 125C	1000 Hours	3/231/0
ELFR	B2	AEC-Q100-008	Early Life Failure Rate, 125C	48 Hours	3/2400/0
Test Group C - Package Assembly Integrity Tests					
WBS	C1	AEC-Q100-001	Auto Wire Bond Shear	Cpk>1.33, Ppk>1.67	Pass
WBP	C2	MIL-STD883 Method 2011	Auto Wire Bond Pull	Cpk>1.33, Ppk>1.67	Pass
Test Group E - Electrical Verification					
HBM	E2	AEC-Q100-002	ESD - HBM	2000 V	3/9/0
CDM	E3	AEC-Q100-011	ESD - CDM	750 V	3/9/0
LU	E4	AEC-Q100-004	Latch-up	LUPS 25C	3/18/0
LU	E4	AEC-Q100-004	Latch-up	LUPS 125C	3/18/0
Additional Tests					
MQ		Per site Specification	Manufacturability (Wafer Fab)	-	Pass
WLR		Per site Specification	Wafer level Reliability	-	Pass

Note 1: EOS, Invalid failures not related to the ABCD5HV technology or stress

A1 (PC): Preconditioning;
Performed for Biased HAST, AC, & TC samples, as applicable.

Junction Operating Temperature by Automotive Grade Level:
Grade 0 (or E): -40Å°C to +150Å°C
Grade 1 (or Q): -40Å°C to +125Å°C
Grade 2 (or T): -40Å°C to +105Å°C
Grade 3 (or I) : -40Å°C to +85Å°C
Grade 4 (or C): -40Å°C to +70Å°C

E1 (TEST): Electrical test temperatures of Qual samples (High temperature according to Grade level):
Room/Hot/Cold : HTOL
Room/Hot : HAST, TC , HTSL, ELFR, ESD & LU
Room : AC

Green/Pb-free Status:
Qualified Pb-Free(SMT) and Green

For questions regarding this notice, e-mails can be sent to the regional contacts shown below, or you can contact your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com